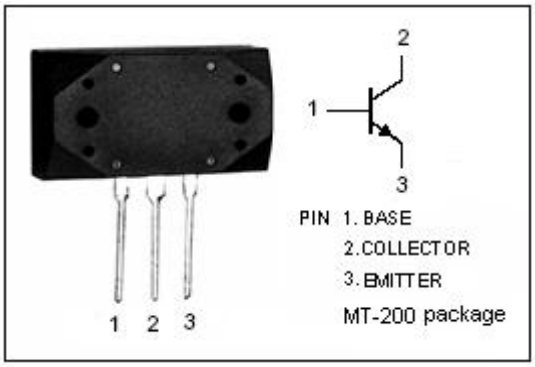
isc Silicon NPN Power Transistor — 2SC2921



DESCRIPTION

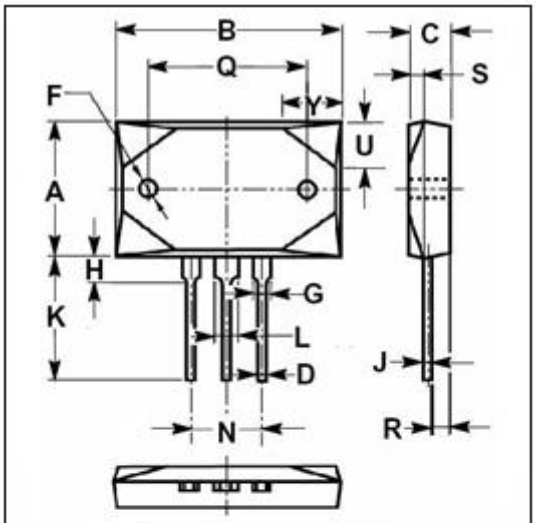
- Collector-Emitter Breakdown Voltage-
  $V_{(BR)CEO}$= 160V(Min)
- High Power Dissipation
- Complement to Type 2SA1215
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For audio and general purpose applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	15	A
I_B	Base Current-Continuous	4	A
P_C	Collector Power Dissipation @ T_C=25℃	150	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	21.00	21.70
B	35.80	36.70
C	5.60	6.20
D	1.04	1.07
F	3.10	3.50
G	1.90	2.40
H	3.60	4.00
J	0.55	0.85
K	20.00	20.80
L	2.90	3.40
N	10.50	11.10
Q	24.00	24.50
R	2.90	3.30
S	2.00	2.20
U	6.90	7.10
Y	8.90	9.10

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 25mA; I_B= 0	160			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 5A; I_B= 0.5A			2.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 160V; I_E= 0			100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			100	μA
h_{FE}	DC Current Gain	I_C= 5A; V_{CE}= 4V	50		180	
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f_{test}= 1.0MHz		200		pF
f_T	Current-Gain—Bandwidth Product	I_E= -2A; V_{CE}= 12V	10			MHz
Switching times						
t_{on}	Turn-on Time	I_C= 5A; R_L= 12Ω, I_{B1}= -I_{B2}= 0.5A, V_{CC}≒ 60V		0.2		μs
t_{stg}	Storage Time			1.5		μs
t_f	Fall Time			0.35		μs

◆ **h_{FE} Classifications**

O	P	Y
50-100	70-140	90-180